Proposal for a Model Disclosure Practice for Actuarial Valuation Reports on Public Retirement Systems in California:

As part of its effort to influence and improve actuarial practice with respect to public retirement systems in California, the California Actuarial Advisory Panel could adopt a model practice for actuarial valuation report disclosures for public retirement systems in California.

Such a model practice would not represent a minimum standard of practice but rather a level of disclosure that actuaries could develop towards with respect to their reports on the actuarial valuations of public retirement systems in the State of California. It is hoped that the model practice would gradually be adopted by the majority of pension and OPEB actuaries practicing in the public sector in California.

Basic Disclosures: The basic disclosures shown below represent a modest extension on current actuarial practice in the public sector in California. Much of the information below can be found in current actuarial valuation reports.

1. Normal Cost

   A. General. The normal cost should be disclosed in sufficient detail so that the user can understand how this element of the recommended contribution is determined and how it is to be paid.

   B. Form. The Normal Cost would usually be determined as either a percent of pay or a dollar amount[1]. If the normal cost is not determined as a dollar amount, the estimated dollar amount of the contributions should also be disclosed.

   C. Timing The disclosure should indicate the assumed timing of the normal cost within the contribution year: beginning of year, during they year (e.g., by pay period), end of year, etc.

   D. Funding source. For contributory plans the disclosure should indicate the total normal cost, the portion funded by member contributions, and the net employer normal cost.

2. Actuarial Accrued Liability (AAL)
3. Market Value of Assets (MVA) and Actuarial Value of Assets (AVA)
4. Unfunded Actuarial Accrued Liability (UAAL)

   On both an AVA basis and a MVA basis

[1] Where there are active members, the normal cost will usually be expressed as a percentage of pay. However, in some circumstances it may be appropriate to determine the normal cost on some other basis such as a level dollar amount. Where there are no active members, the normal cost would normally be determined as $0.

5. Current Contribution Requirement

   As with the Normal Cost, this should be disclosed in sufficient detail so that the user can understand how the recommended contribution is determind and how it is to be paid. The current contribution would usually be determined as either a percent of pay or a dollar amount[2]. If the current contribution is not determined as a dollar amount, the estimated dollar amount of the contributions should also be disclosed.

   [see additional disclosures for normal cost; generally include here as well]

6. UAAL Amortization Schedule
7. Funded Ratios on both an AVA and MVA basis (AAL/AVA, AAL/MVA)
8. Asset Smoothing Ratio (AVA / MVA) before and after any MVA corridor
9. Volatility Ratios[A1][TSC2]

   Asset Volatility Ratio: MVA/Payroll – This ratio provides an indication of the potential contribution volatility for any given level of investment volatility. A plan with an Asset Volatility Ratio of 10 would have double the level of contribution volatility of a plan with an Asset Volatility Ratio of 5.[3] This is a current measure since it is based on the current level of assets.

   Liability Volatility Ratio: AAL/Payroll –This ratio provides an indication of the longer-term potential for contribution volatility for any given level of investment volatility.[4] In addition, this ratio provides an indication of the potential contribution volatility due to liability experience (gains and losses) and liability remeasurements (assumption changes).

Risk Disclosures: These disclosures are intended to give the user of the report additional information and understanding of the risks associated with the funding of the pension plan. [TSC3]

10. Disclose the assumptions used in the actuarial valuation and discuss the extent to which professional judgment was exercised in the selection of those assumptions;
11. Disclose the principal methodologies used in the actuarial valuation and the reason(s) for using those methodologies;

[2] Where there are active members, the current contribution requirement will usually be expressed as a percentage of pay. However, in some circumstances it may be appropriate to determine the current contribution requirement on some other basis such as a fixed dollar amount. Where there are no active members, the current contribution requirement would normally be determined as a fixed dollar amount.

[3] If a plan has an asset volatility ratio of 10, a 10% loss on assets translates to 100% of payroll. This will have a substantial impact on required contributions regardless of the amortization or other smoothing mechanisms. However, for a plan has an asset volatility ratio of 5, a 10% loss on assets translates to 50% of payroll and would only have half the impact on contributions of a plan with an asset volatility ratio of 10.

[4] This is because the assets should track the liabilities over an extended period of time. If a plan is 50% funded on a market value basis, the liability volatility ratio would be double the asset volatility ratio and the plan sponsor should expect contribution volatility to increase over time as the plan becomes better funded.

12. Include a sensitivity analysis showing the impact of changes in key assumptions and methodologies;
13. Include additional disclosures designed to communicate with users regarding the risks inherent in the system which could be, but are not limited to:
    a. A stochastic or probabilistic analysis on the impact of key variables including the expected investment return, or
    b. A stress test of the results under appropriately chosen scenarios; and
14. Include a discussion of concerns that users should be aware of regarding the capacity of the system to cope with various types and levels of risk[TSC4].

Other Enhanced Disclosures: These disclosures go beyond what is usual currently and may require additional work on the part of the actuary. Because of the cost implications, we would expect these disclosures to be adopted more slowly than the Basic Disclosures above. Nevertheless, we believe that these disclosures will, in many cases, add value to the report and hope that they will gradually become the norm for public plan actuarial work where appropriate.

15. Contribution Requirement on an MVA basis

    What the current contribution requirement would be if the AVA were equal to the MVA
16. Expanded Contribution History (10 years or more)

    Actuarially determined amount (based on estimated or actual payroll)

    Funding policy amount, if different (based on estimated or actual payroll)

    Actual contribution amount[5]
17. Funding Policy History

    Changes in asset smoothing method

    Changes in UAAL amortization policy

    Changes in other funding policies (incl. cost method)

    For each: effect and reason
18. Changes in Economic Assumptions

    Includes price inflation, wage inflation, and investment earnings

    For each, effect and reason
19. Projections

    Future Benefits and Contributions, Future Funded Status[6]

[5] If the contribution was determined on anything other than a dollar amount, the actual contribution will be different from the expected contribution.

It is not anticipated that all of these disclosures would be included in every actuarial communication but rather would be included in key communications such as the regular (often annual) actuarial valuation report for funding purposes.

[6] A projection of the funded status is more appropriate in some circumstances than others. It is particularly useful when the employer is not contributing the actuarially determined amount. It would also be appropriate when the combination of asset smoothing, and amortization policies is such that the funded status is not expected to increase when all assumptions are met.